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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,444	01/05/2001	Olivier Hericourt	FR919990082US1	5121
25259	7590	06/15/2004	EXAMINER	
IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			NGUYEN, HAI V	
			ART UNIT	PAPER NUMBER
			2142	4
DATE MAILED: 06/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/755,444

Applicant(s)

HERICOURT, OLIVIER

Examiner

Hai V. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is in response to the application filed on 05 January 2001.
2. Claims 1-11 are presented for examination.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 recites the limitation "selecting a socks server \ referring to a first table \, said first table defining for each value of the TOS field one or a plurality of socks servers." in claim 1. There are symbols of "\ " in the claim. There is insufficient antecedent basis for this limitation in the claim or typing error.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 10-11 are rejected under 35 U.S.C. 101 because the claims recite "the computer program product having computer readable code" is NOT equivalent to the computer readable medium. The computer program product is the product pro se.

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by **Colby et al.** US patent no. **6,449,647 B1**.

9. As to claim 1, Colby, Content Aware Switching Of Network Packets, substantially teaches the invention as claimed, including a method of dispatching an IP datagram (content flow) comprising socks traffic on a socks server, in an Internet Protocol (IP) network comprising a plurality of socks servers, said IP datagram comprising an IP header comprising a Type Of Service (TOS) field, said method comprising the steps of:

in a socks dispatcher:

- retrieving the value of a Type Of Service (TOS) field from the IP header of the IP datagram (*Colby, col. 2, lines 14-51*); and

- selecting a socks server (a Web server) referring to a first table (*a list of candidate servers*), said first table defining for each value of the TOS field, one or a plurality of socks servers (*candidate servers*) (*Colby, col. 2, line 54 – col. 4, line 4; col. 9, line 5 – col. 10, line 59; col. 10, line 60 – col. 11, line 67*).

10. As to claim 2, Colby teaches wherein said IP datagram is sent by an IP network device with a given priority, and wherein said step of retrieving the value of the Type Of Service (TOS) field is followed by the further step of:

in the socks dispatcher:

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• determining the priority of the IP datagram by referring to a second table (QoS category), said second table defining a priority for each value of the Type Of Service (TOS) field (*Colby, col. 2, lines 14-51; col. 2, line 54 – col. 4, line 4; col. 9, line 5 – col. 10, line 59; col. 10, line 60 – col. 11, line 67; col. 12, line 59 – col. 13, line 19*).

11. As to claim 3, Colby teaches, wherein said IP datagram comprises data according to a given application level protocol, said step of determining the priority of the IP datagram comprising the further step of:

• determining the application level protocol of data (QoS class) transported in said IP datagram by referring to said second table, said second table defining a priority and an application level protocol for each value of the Type Of Service (TOS) field (*Colby, col. 2, lines 14-51; col. 2, line 54 – col. 4, line 4; col. 9, line 5 – col. 10, line 59; col. 10, line 60 – col. 11, line 67; col. 12, line 59 – col. 13, line 19*).

12. As to claim 5, Colby teaches wherein said first table comprises for each sock server: • an identifier, preferably an address, • one or a plurality of TOS field values, • optionally, a sock server capacity, • optionally, application level protocols supported by the socks server (*Colby, col. 2, lines 14-51; col. 2, line 54 – col. 4, line 4; col. 9, line 5 – col. 10, line 59; col. 10, line 60 – col. 11, line 67; col. 12, line 59 – col. 13, line 19*).

13. As to claim 6, Colby teaches steps of: • configuring said first and second tables,

• defining a default socks server for values of the Type Of Service (TOS) field not defined in the first table, and

• defining a default priority and optionally a default application level protocol for values of the Type Of Service (TOS) field not defined in the second table (*Colby, col. 2,*

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*lines 14-51; col. 2, line 54 – col. 4, line 4; col. 9, line 5 – col. 10, line 59; col. 10, line 60 – col. 11, line 67; col. 12, line 59 – col. 13, line 19).*

14. As to claim 7, Colby teaches wherein the step of selecting a socks server referring to a first table, said first table defining for each value of the Type Of Service (TOS) field one or a plurality of socks servers, comprises the further steps of:

- determining the number of socks servers defined for the value of the Type Of Service (TOS) field retrieved from the IP datagram:

- if only one socks server is defined in the first table, forwarding the IP datagram to said socks server, and
- if more than one socks server is defined in the first table, forwarding the IP datagram to a socks server selected according to its capacity and the priority of the IP datagram (*Colby, col. 2, lines 14-51; col. 2, line 54 – col. 4, line 4; col. 9, line 5 – col. 10, line 59; col. 10, line 60 – col. 11, line 67; col. 12, line 59 – col. 13, line 19).*

15. Claim 8 is corresponding apparatus claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

16. Claim 9 is similar limitation of claim 2; therefore, it is rejected under the same rationale as in claim 2.

### ***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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18. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby as applied to claims 1-3 above, and further in view of **Chapman** US patent no. **6,304,552 B1**.

19. As to claim 4, Colby does not explicitly discarding IP datagrams having the lowest priority.

In the same field of endeavor, Chapman, Memory And Apparatus For Input Based Control Of Discards In a Lossy Packet Network, discloses in Fig. 9, item 912 that discarding all LO packets arriving at queue (*Fig. 9, item 912, col. 12, line 62 – col. 10, line 48*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Chapman's teachings of discarding low priority packets (*Fig. 9, item 912, col. 12, line 62 – col. 10, line 48*) with the teachings of Colby, for the purpose of improving the management of IP-layer bandwidth allocation and packet discard within a lossy data communication network arrangement and more controlling the data units transport and discard process in a switch (*Chapman, col. 2, lines 42-67*).

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20. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 703-306-0276. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai V. Nguyen  
Examiner  
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JACK B. HARVEY  
SUPERVISORY PATENT EXAMINER